Author Index

Abdalla, S.T. and Hassan, M.Z. Optimal planting data for seed quality and seed yield of irrigated soybean in Egypt, 145

Abraham, K., Nair, S.G. and Sreekumari, M.T. White yam, *Dioscorea rotundata* Poir., dwarf type, 184

Acamovic, T. *see* D'Mello, J.P.F., 201

Adebowale, E.A. Response of West African Dwarf sheep and goats fed maize cobs treated with different concentrations of caustic soda, 213

Adekunle, A.A. *see* Adetiloye, P.O., 337

Adetiloye, P.O. and Adekunle, A.A. Concept of monetary equivalent ratio and its usefulness in the evaluation of intercropping advantages, 337

Aggarwal, V.D. and Ouedraogo, J.T. Estimation of cowpea yield loss from *Striga* infestation, 91

Agrawal, H.O. *see* Misra, S.S., 317

Akinsoyinu, A.O. *see* Onwuka, C.F.I., 158

Akoroda, M.O., Gebremeskel, T. and Oyinlola, A.E. Impact of IITA cassava varieties in Oyo State, Nigeria, 1976–1985, 113

Alami, M.S. *see* Osman, H.E., 153

Ali, S.S. *see* Thomas, G.V., 21

Almazan, A.M. and Theberge, R.L. Influence of cassava mosaic virus on cassava leaf-vegetable quality, 305

Andrews, K.L. *see* Trabanino, C.R., 225

Anil Kumar, T.B. *see* Chandrashekar, M., 149

Arnold, N.P. *see* Barthakur, N.N., 65

Asiegbu, J.E. Response of onion to lime and fertilizer N in a tropical Ultisol, 161

Ayeni, J.S.O. *see* Ayorinde, K.L., 277

Ayesu-Offei, E.N. *Formae speciales* of *Leveillula taurica* (Lev.) Arn. infecting peppers and eggplants in Ghana, 355

Ayorinde, K.L. Effect of semen dosage and insemination frequency on the fertility of local Pearl guinea fowl in Nigeria, 135

Ayorinde, K.L., Ayeni, J.S.O. and Oluyemi, J.A. Laying characteristics and reproductive performance of four indigenous helmeted guinea fowl varieties (*Numida meleagris galeata* Pallas) in Nigeria, 277

Bagchi, D.K., Banerjee, A. and Sasmal, B.C. Studies on plant growth and pod development in the winged bean, *Psophocarpus tetragonolobus* (L.) DC, 240

Balaine, D.S. *see* Khanna, A.S., 365

Banerjee, A. *see* Bagchi, D.K., 240

Barthakur, N.N. and Arnold, N.P. Certain organic and inorganic constituents in bael (*Aegle marmelos* Correa) fruit, 65

Beri, V., Meelu, O.P. and Khind, C.S. Biomass production, N accumulation, symbiotic effectiveness and mineralization of green manures in relation to yield of wetland rice, 11

Beri, V., Meelu, O.P. and Khind, C.S. Studies of *Sesbania aculeata* Pers. as green manure for N-accumulation and substitution of fertilizer-N in wetland rice, 209

Biswas, P.K. *see* Pal, P.N., 176

Bollet, C., Gulian, C., Mallet, M.N., Estrangin, E. and de Micco, P. Isolation of *Serratia rubidaea* (Strapp) from fresh and spoiled coconuts, 342

Brah, G.S. and Sandhu, J.S. Preincubation storage of guineafowl eggs in cooling cabinet vs room: effect on hatchability components, 265

Brooks, C.B. *see* Dadson, R.B., 169

Buvanendran, V. *see* Oni, O.O., 369

Carbon, W. *see* Plumbley, R.A., 129

Carvalho, L.J.C.B. and Schank, S.C. Effect of water stress on the growth of *Stylosanthes hamata* (L.) Taub. cv Verano and *Stylosanthes guianensis* (Aubl.) Sw. cv Scholfield, 105

Castro, M.C., Pitre, H.N. and Meckenstock, D.H. Populations of fall armyworm, *Spodoptera frugiperda* (J.E. Smith), larvae and associated natural enemies in sorghum and maize cropping systems in southern Honduras, 259

Chandel, A.S., Pandey, K.N. and Saxena, S.C. Symbiotic nitrogen fixation and nitrogen benefits by nodulated soybean (*Glycine Max* (L.) Merrill) in interplanted crops in northern India, 73

Chandrashekar, M., Anil Kumar, T.B., Saifulla, M. and Yadahally, Y.H. Effect of different dates of sowing cowpea on the severity of leaf rust caused by *Uromyces phaseoli* var. vignea, 149

D'Mello, J.P.F., Acamovic, T. and Walker, A.G. Nutritive value of jack beans (*Canavalia ensiformis* (L.) DC.) for young chicks: effects of amino acid supplementation, 201

Dadson, R.B. and Brooks, C.B. Responses of bambara groundnut (*Voandzeia subterranea* (L.) Thouars) to applied nitrogen in Southern Togo, 169

Das, A.K. *see* Dash, M.C., 179

Dash, M.C. and Das, A.K. Earthworm cast as a substitute for wheat supplementation in the growth of tropical edible mushroom, *Pleurotus sajor-caju*, 179

de Micco, P. *see* Bollet, C., 342

Dhiman, J.S., Lal, T. and Singh, S. Reaction of cowpea cultivars to bacterial blight, anthracnose and cowpea mosaic diseases and their effects on economic performance, 17

Dhua, R.S. and Sen, S.K. Seasonal changes in active tannin content in pulp and peel of the Giant Governor banana during fruit growth and maturity, 284

Dim, N.I. *see* Oni, O.O., 369

Dowell, R.V. Factors affecting the field effectiveness of *Encarsia opulenta* (Hymenoptera: Aphelinidae), a parasitoid of the citrus blackfly, *Aleurocanthus woglumi* (Homoptera: Aleyrodidae), 110

Duncan, H.J. *see* Olademeji, M.O., 206

Effah-Baah, K. *see* Osei, S.A., 256

Ene-Obong, E.E. and Kanu, J.I. Response of F1 interspecific hybrids of *Solanum* to nitrogen fertilization, insecticide and fungicide treatments, 181

Estrangin, E. *see* Bollet, C., 342

Ezumah, H.C. *see* Ikeorgu, J.E.G., 78

Fageria, N.K. Effects of phosphorus on growth, yield and nutrient accumulation in the common bean, 249

Gebremeskel, T. *see* Akoroda, M.O., 113

Ghai, S.K. *see* Thomas, G.V., 21

Gorbet, D.W. *see* Knauft, A.D., 243

Gulian, C. *see* Bollet, C., 342

Gupta, D.C. *see* Kandasamy, N., 167

Gupta, I.D. *see* Pal, P.N., 176

Gupta, R. *see* Parrek, S.K., 69

Gupta, J.P. Integrated effect of water harvesting, manuring and mulching on soil properties, growth and yield of crops in pearl millet-mungbean rotation, 233

Gupta, R.P. Kalra, M.S. and Schoo, M.S. Intrinsic multiple antibiotic resistance markers for clover cultivars and *Rhizobium* strain interaction, 313

Haque, S.Q. *see* Rajnauth, G.L., 221

Hassan, M.Z. *see* Abdalla, S.T., 145

Ifenkwe, O.P., Odurukwe, S.O., Okonkwo, J.C. and Nwokocha, H.N. Effects of maize and potato populations on tuber and grain yields, net income and land equivalent ratios in potato/maize intercropping, 329

Igwilo, N. Response of yam cultivars to staking and fertilizer application, 38

Ikeorgu, J.E.G., Wahua, T.A.T. and Ezumah, H.C. Effects of melon (*Citrullus lanatus* Thunb.) and okra

Author Index

Abdalla, S.T. and Hassan, M.Z. Optimal planting data for seed quality and seed yield of irrigated soybean in Egypt, 145

Abraham, K., Nair, S.G. and Sreekumari, M.T. White yam, *Dioscorea rotundata* Poir., dwarf type, 184

Acamovic, T. *see* D'Mello, J.P.F., 201

Adebowale, E.A. Response of West African Dwarf sheep and goats fed maize cobs treated with different concentrations of caustic soda, 213

Adekunle, A.A. *see* Adetiloye, P.O., 337

Adetiloye, P.O. and Adekunle, A.A. Concept of monetary equivalent ratio and its usefulness in the evaluation of intercropping advantages, 337

Aggarwal, V.D. and Ouedraogo, J.T. Estimation of cowpea yield loss from *Striga* infestation, 91

Agrawal, H.O. *see* Misra, S.S., 317

Akinsoyinu, A.O. *see* Onwuka, C.F.I., 158

Akoroda, M.O., Gebremeskel, T. and Oyinlola, A.E. Impact of IITA cassava varieties in Oyo State, Nigeria, 1976–1985, 113

Alami, M.S. *see* Osman, H.E., 153

Ali, S.S. *see* Thomas, G.V., 21

Almazan, A.M. and Theberge, R.L. Influence of cassava mosaic virus on cassava leaf-vegetable quality, 305

Andrews, K.L. *see* Trabanino, C.R., 225

Anil Kumar, T.B. *see* Chandrashekar, M., 149

Arnold, N.P. *see* Barthakur, N.N., 65

Asiegbu, J.E. Response of onion to lime and fertilizer N in a tropical Ultisol, 161

Ayeni, J.S.O. *see* Ayorinde, K.L., 277

Ayesu-Offei, E.N. *Formae speciales* of *Leveillula taurica* (Lev.) Arn. infecting peppers and eggplants in Ghana, 355

Ayorinde, K.L. Effect of semen dosage and insemination frequency on the fertility of local Pearl guinea fowl in Nigeria, 135

Ayorinde, K.L., Ayeni, J.S.O. and Oluyemi, J.A. Laying characteristics and reproductive performance of four indigenous helmeted guinea fowl varieties (*Numida meleagris galeata* Pallas) in Nigeria, 277

Bagchi, D.K., Banerjee, A. and Sasmal, B.C. Studies on plant growth and pod development in the winged bean, *Psophocarpus tetragonolobus* (L.) DC, 240

Balaine, D.S. *see* Khanna, A.S., 365

Banerjee, A. *see* Bagchi, D.K., 240

Barthakur, N.N. and Arnold, N.P. Certain organic and inorganic constituents in bael (*Aegle marmelos* Correa) fruit, 65

Beri, V., Meelu, O.P. and Khind, C.S. Biomass production, N accumulation, symbiotic effectiveness and mineralization of green manures in relation to yield of wetland rice, 11

Beri, V., Meelu, O.P. and Khind, C.S. Studies of *Sesbania aculeata* Pers. as green manure for N-accumulation and substitution of fertilizer-N in wetland rice, 209

Biswas, P.K. *see* Pal, P.N., 176

Bollet, C., Gulian, C., Mallet, M.N., Estrangin, E. and de Micco, P. Isolation of *Serratia rubidaea* (Strapp) from fresh and spoiled coconuts, 342

Brah, G.S. and Sandhu, J.S. Preincubation storage of guineafowl eggs in cooling cabinet vs room: effect on hatchability components, 265

Brooks, C.B. *see* Dadson, R.B., 169

Buvanendran, V. *see* Oni, O.O., 369

Carbon, W. *see* Plumbley, R.A., 129

Carvalho, L.J.C.B. and Schank, S.C. Effect of water stress on the growth of *Stylosanthes hamata* (L.) Taub. cv Verano and *Stylosanthes guianensis* (Aubl.) Sw. cv Scholfield, 105

Castro, M.C., Pitre, H.N. and Meckenstock, D.H. Populations of fall armyworm, *Spodoptera frugiperda* (J.E. Smith), larvae and associated natural enemies in sorghum and maize cropping systems in southern Honduras, 259

Chandel, A.S., Pandey, K.N. and Saxena, S.C. Symbiotic nitrogen fixation and nitrogen benefits by nodulated soybean (*Glycine Max* (L.) Merrill) in interplanted crops in northern India, 73

Chandrashekar, M., Anil Kumar, T.B., Saifulla, M. and Yadahally, Y.H. Effect of different dates of sowing cowpea on the severity of leaf rust caused by *Uromyces phaseoli* var. vignea, 149

D'Mello, J.P.F., Acamovic, T. and Walker, A.G. Nutritive value of jack beans (*Canavalia ensiformis* (L.) DC.) for young chicks: effects of amino acid supplementation, 201

Dadson, R.B. and Brooks, C.B. Responses of bambara groundnut (*Voandzeia subterranea* (L.) Thouars) to applied nitrogen in Southern Togo, 169

Das, A.K. *see* Dash, M.C., 179

Dash, M.C. and Das, A.K. Earthworm cast as a substitute for wheat supplementation in the growth of tropical edible mushroom, *Pleurotus sajor-caju*, 179

de Micco, P. *see* Bollet, C., 342

Dhiman, J.S., Lal, T. and Singh, S. Reaction of cowpea cultivars to bacterial blight, anthracnose and cowpea mosaic diseases and their effects on economic performance, 17

Dhua, R.S. and Sen, S.K. Seasonal changes in active tannin content in pulp and peel of the Giant Governor banana during fruit growth and maturity, 284

Dim, N.I. *see* Oni, O.O., 369

Dowell, R.V. Factors affecting the field effectiveness of *Encarsia opulenta* (Hymenoptera: Aphelinidae), a parasitoid of the citrus blackfly, *Aleurocanthus woglumi* (Homoptera: Aleyrodidae), 110

Duncan, H.J. *see* Olademeji, M.O., 206

Effah-Baah, K. *see* Osei, S.A., 256

Ene-Obong, E.E. and Kanu, J.I. Response of F1 interspecific hybrids of *Solanum* to nitrogen fertilization, insecticide and fungicide treatments, 181

Estrangin, E. *see* Bollet, C., 342

Ezumah, H.C. *see* Ikeorgu, J.E.G., 78

Fageria, N.K. Effects of phosphorus on growth, yield and nutrient accumulation in the common bean, 249

Gebremeskel, T. *see* Akoroda, M.O., 113

Ghai, S.K. *see* Thomas, G.V., 21

Gorbet, D.W. *see* Knauft, A.D., 243

Gulian, C. *see* Bollet, C., 342

Gupta, D.C. *see* Kandasamy, N., 167

Gupta, I.D. *see* Pal, P.N., 176

Gupta, R. *see* Parrek, S.K., 69

Gupta, J.P. Integrated effect of water harvesting, manuring and mulching on soil properties, growth and yield of crops in pearl millet-mungbean rotation, 233

Gupta, R.P. Kalra, M.S. and Schoo, M.S. Intrinsic multiple antibiotic resistance markers for clover cultivars and *Rhizobium* strain interaction, 313

Haque, S.Q. *see* Rajnauth, G.L., 221

Hassan, M.Z. *see* Abdalla, S.T., 145

Ifenkwe, O.P., Odurukwe, S.O., Okonkwo, J.C. and Nwokocha, H.N. Effects of maize and potato populations on tuber and grain yields, net income and land equivalent ratios in potato/maize intercropping, 329

Igwilo, N. Response of yam cultivars to staking and fertilizer application, 38

Ikeorgu, J.E.G., Wahua, T.A.T. and Ezumah, H.C. Effects of melon (*Citrullus lanatus* Thunb.) and okra

(*Abelmoschus esculentus* (L.) Moench) on the soil moisture and leaf water status of intercropped cassava/maize in Nigeria, 78

Jeger, M.J. *see* Plumbley, R.A., 129
Jones, M.J. and Sinclair, J. Effects of bare fallowing, previous crop and time of ploughing on soil moisture conservation in Botswana, 54

Kabaija, E. and Smith, O.B. Influence of season and age of regrowth on the mineral profile of *Gliricidia sepium* and *Leucaena leucocephala*, 125
Kabir, J. and Sen, S. Correlation and path analysis in *Lablab niger* Medik, *Dolchis uniflorus* Lam. and their F1, 281
Kalra, M.S. *see* Gupta, R.P., 313
Kalu, B.A. Seed yam production by minisett technique: evaluation of three *Dioscorea* species in the Guinea and derived Savanna zone of Nigeria, 83
Kandasamy, N. and Gupta, D.C. Factors affecting greasy fleece weight of indigenous and crossbred sheep under semi-arid conditions, 167
Kanu, J.I. *see* Ene-Obong, E.E., 181
Ketsa, S., Tongumpai, P. and Uthaiburt, C. Effect of daminozide on off-season growth and heading of leaf mustard, 187
Khanna, A.S. and Balaine, D.S. Simulating lactation milk yield from interval recording in crossbred (temperate × Zebu) dairy cattle, 365
Khind, C.S. *see* Beri, V., 11
Khind, C.S. *see* Beri, V., 209
Knauft, D.A. and Gorbet, D.W. Analysis of peanut production in stress and non-stress environments, 243
Kompiang, S. *see* Little, D.A., 33
Kozlowski, T.T. *see* Sena Gomes, A.R., 137
Krikorian, A.D. *In vitro* culture of bananas and plantains: background, update and call for information, 194
Kundu, S.S. Improving the nutritive value of wheat straw for buffaloes by urea treatment, 321

Lal, T. *see* Dhiman, J.S., 17
Lauckner, F.B. Survey of the use of statistics in agricultural research journals, 2
Little, D.A. Kompiang, S. and Petheram, R.J. Mineral composition of Indonesian ruminant forages, 33

Mallet, M.N. *see* Bollet, C., 342
Martin, P.J. and Riley, J. Indirect method for estimating clove tree yields, 361
Matsumoto, K. and Yamaguchi, H. Nonwoven materials as a supporting agent for *in vitro* culture of banana protocorm-like bodies, 8
Mbap, S.T. and Ngere, L.O. Productivity of Friesian cattle in a subtropical environment, 121
McNeil, D.L. Factors affecting the field establishment of *Plantago ovata* Forsk. in northern Australia, 61
McNeil, D.L. Weed control in *Plantago ovata* Forsk., 98
Meckenstock, D.H. *see* Trabanino, C.R., 225
Meckenstock, D.H. *see* Castro, M.C., 259
Meelu, O.P. *see* Beri, V., 11
Meelu, O.P. *see* Beri, V., 209
Mian, H.R. *see* Osman, H.E., 153
Misra, S.S. and Agrawal, H.O. Phorate and disulfoton residues in potatoes grown in north-western plains of India, 317
Mukasa-Mugerwa, E., Tegegne, A. and Warnick, A.C. Time of artificial insemination and pregnancy rates in Boran (*Bos indicus*) cattle, 230
Mukhopadhyay, A.K. *see* Tarafdar, P.K., 87
Muniyappa, V. *see* Saikia, A.K., 350

Nair, P.C.S. *see* Nybe, E.V., 345
Nair, S.G. *see* Abraham, K., 184
Ngere, L.O. *see* Mbap, S.T., 121
Nwokocha, H.N. *see* Ifenkwe, O.P., 329
Nybe, E.V., Nair, P.C.S. and Wahid, P.A. Relationships of foliar nutrient levels of yield in black pepper (*Piper nigrum* L.), 345

Odurukwe, S.O. *see* Ifenkwe, O.P., 329
Ofuya, T.I. Effect of weed removal regimes on post-flowering insect damage and grain yield of cowpea, *Vigna unguiculata* (L.) Walp. in a rain forest area of Nigeria, 142
Okonkwo, J.C. *see* Ifenkwe, O.P., 329
Olademeji, M.O., Stephen, N.H. and Duncan, H.J. CIPC formulations for control of potato sprouting under tropical temperatures, 206
Olofintoye, J.A. Tillage and weed control practices for upland rice (*Oryza sativa* L.) on a hydromorphic soil in the Guinea savanna of Nigeria, 43
Ologhobo, A.D. Improving the nutritive value of soyabean (*Glycine max* (L.) Merr.) through processing: biochemical and protein quality studies, 290
Olufolaji, A.O. and Tayo, T.O. Performance of four morphotypes of *Amaranthus cruentus* L. under two harvesting methods, 273
Oluyemi, J.A. *see* Ayorinde, K.L., 277
Oni, O.O., Buvanendran, V. and Dim, N.I. Estimates of genetic and phenotypic parameters for body weight in Bunaji (White Fulani) cattle, 369
Onwuka, C.F.I. and Akinsoyinu, A.O. Effects of elemental sulphur levels on urea-nitrogen utilization by West African dwarf goats and sheep, 158
Osei, S.A. and Effah-Baah, K. Reproductive performances of N'dama and West African Shorthorn cattle in the humid forest zone of Ghana, 256
Osman, H.E., Samarraie, S.M., Mian, H.R. and Alami, M.S. Growth analysis of maize and sunflower under different irrigation regimes, 153
Ouedraogo, J.T. *see* Aggarwal, V.D., 91
Oyinlola, A.E. *see* Akoroda, M.O., 113
Pal, P.N., Biswas, P.K. and Gupta, I.D. Effective treatment of stephanofilarial dermatitis in cattle, 176

Pandey, K.N. *see* Chandel, A.S., 73
Parrek, S.K., Srivastava, V.K. and Gupta, R. Effect of source and mode of nitrogen application on senna (*Cassia angustifolia* Vahl), 69
Pegus, J.E. *see* Rajnauth, G.L., 221
Petheram, R.J. *see* Little, D.A., 33
Pitre, H.N. *see* Trabanino, C.R., 225
Pitre, H.N. *see* Castro, M.C., 259
Plumbley, R.A., Jeger, M.J. and Carbon, W. Optimal picking data of avocado in Dominica, W. Indies, in relation to flowering, fruit-growth and chilling, 129

Rajnauth, G.L., Pegus, J.E. and Haque, S.Q. Major field vector of cowpea severe mosaic virus in Trinidad, 221
Raju, R.A. and Reddy, M.N. Response of rice (*Oryza sativa* L.) to algalization in combination with chemical nutrients, 334
Reddy, E.V.R. *see* Reddy, S.N., 309
Reddy, M.N. *see* Raju, R.A., 334
Reddy, M.S. *see* Reddy, S.N., 309
Reddy, P.V. *see* Reddy, S.N., 309
Reddy, V.M. *see* Reddy, S.N., 309
Reddy, S.N., Reddy, E.V.R., Reddy, V.M. Reddy, M.S. and Reddy, P.V. Row arrangement in groundnut/pigeonpea intercropping, 309
Riley, J. *see* Martin, P.J., 361

Saifulla, M. *see* Chandrashekar, M., 149
Saikia, A.K. and Muniyappa, V., Epidemiology and control of tomato leaf curl virus in southern India, 350
Salam, M.A. and Subramanian, S. Nitrogen-insecticide synergism on growth and yield of lowland rice in three seasons, 297
Samarraie, S.M. *see* Osman, H.E., 153
Sandhu, J.S. *see* Brah, G.S., 265
Sasmal, B.C. *see* Bagchi, D.K., 240
Satija, D.R. and Thukral, S.K. Genetic analysis of grain yield and other quantitative traits in pearl millet lines characterized by disease resistance and phytic acid content, 269
Saxena, S.C. *see* Chandel, A.S., 73
Schank, S.C. *see* Carvalho, L.J.C.B., 105
Schoo, M.S. *see* Gupta, R.P., 313
Sen, S.K. *see* Dhua, R.S., 284
Sen, S. *see* Kabir, J., 281
Sena Gomes, A.R. and Kozlowski, T.T. Responses of seedlings of two

varieties of *Theobroma cacao* to wind, 137
Sinclair, J. *see* Jones, M.J., 54
Singh, S. *see* Dhiman, J.S., 17
Smith, O.B. *see* Kabaija, E., 125
Sreekumari, M.T. *see* Abraham, K., 184
Srivastava, V.K. *see* Parrek, S.K., 69
Stephen, N.H. *see* Olademeji, M.O., 206
Subramanian, S. *see* Salam, M.A., 297
Sundararaju, P. *see* Thomas, G.V., 21

Tarafdar, P.K. and Mukhopadhyay, A.K. Availability of K to crops at mineral exchangeable K level in soil by exhaustive cropping, 87
Tayo, T.O. *see* Olufolaji, A.O., 273
Tegegne, A. *see* Mukasa-Mugerwa, E., 230
Thambirajah, J.J. Safety evaluation of cassava fermented with microfungi, 326
Theberge, R.L. *see* Almazan, A.M., 305
Thomas, G.V., Sundararaju, P., Ali, S.S. and Ghai, S.K. Individual and interactive effects of VA mycorrhizal fungi and root-knot nematode, *Meloidogyne incognita*, on cardamom, 21
Thornton, P.K. Computer experimentation with an energy-based simulation model of animal production in the eastern savannas of Colombia, 217
Thukral, S.K. *see* Satija, D.R., 269
Tongumpai, P. *see* Ketsa, S., 187
Trabanino, C.R., Pitre, H.N., Andrews, K.L. and Meckenstock, D.H. Effect of seed size, colour, number of seeds per hill and depth of planting on sorghum seed survival and stand establishment: relationship to phytophagous insects, 225

Ugherughe, P.O. Cytomorphological studies in some *Cynodon* species and hybrids, 25
Uthaiburt, C. *see* Ketsa, S., 187

Wahid, P.A. *see* Nybe, E.V., 345
Wahua, T.A.T. *see* Ikeorgu, J.E.G., 78
Walker, A.G. *see* D'Mello, J.P.F., 201
Warnick, A.C. *see* Mukasa-Mugerwa, E., 230
Wilson, R.T. Livestock production in central Mali: economic characters and productivity indices for Sudanese Fulani cattle in the agro-pastoral system, 49

Yadahally, Y.H. *see* Chandrashekar, M., 149
Yamaguchi, H. *see* Matsumoto, K., 8

Subject Index

Aegle marmelos,
Bael fruit, 65
Aleurocanthus woglumi
Encarsia opulenta, Biological control, 110
Allium cepa
Onion, Lime, N fertilizer, 161
Amaranthus
Pruning, Uprooting, 273
Animal production
Computer simulation, 217
Anthracnose
Cowpea, Resistance, multiple, Cowpea mosaic virus, Bacterial blight, 17
Antibiotic resistance
Clover, *Rhizobium*, 313
Arachis hypogaea
Peanut, 243
Artificial insemination
Cattle, Zebu, Prostaglandin, 230
Guinea fowl, Fertility, 135
Avocado
Picking date, Chilling sensitivity, 129

Bacterial blight
Cowpea, Resistance, multiple, Cowpea mosaic virus, Anthracnose, 17
Bael fruit
Aegle marmelos, 65
Bambara groundnut
Voandzeia subterranea, N application, 169
Banana
Tannin, 284
Tissue culture, *Musa*, 8, 194
Bean
Phaseolus vulgaris, Phosphorus, 249
Bemisia tabaci
Tomato leaf curl virus, Whitefly, 350
Biological control
Encarsia opulenta, *Aleurocanthus woglumi*, 110
Biomass
Green manure, Rice, 11
Biometry
Statistics, Experimental design, 2
Black pepper
Piper nigrum, Foliar nutrients, 345
Body weight
Cattle, Heritability, 369
Book Reviews, 94, 189, 286, 376
Buffalo
Wheat straw, Feedstuff, 321

Cacao
Theobroma cacao, Wind injury, 137
Cananvalia ensiformis
Jack bean, Chicks, 201
Carbofuran
Rice, Nitrogen, 297
Cardamom
Root-knot nematode, VA mycorrhizal fungi, 21
Cassava
Clones, 113
Fermentation, Feedstuff, 326
Maize, Melon, Okra, Intercropping, 78
Cassava mosaic disease
Manihot esculenta, Cyanide, 305
Cassia angustifolia
Senna, N application, 69
Cattle
Friesian, 121
Heritability, Body weight, 369
Productivity indices, Economic characters, 49
Stephanofilarial dermatitis, Diethylcarbamazine, 176
N'dama and West African Shorthorn, 256
Zebu, Artificial insemination, Prostaglandin, 230
Zebu, Milk, Simulation of lactation yield, 365
Cerotoma arcuata
Cowpea severe mosaic virus, Vector, 221
Chemical nutrients
Rice, Algalization, 334
Chicks
Jack bean, *Cananvalia ensiformis*, 201
Chilling sensitivity
Avocado, Picking date, 129
CIPC formulation
Potato, *Solanum tuberosum*, Sprouting, 206

Clones
Cassava, 113
Clove
Yield estimation, 361
Clover
Rhizobium, Antibiotic resistance, 313
Coconut
Serratia rubidaea, 342
Computer simulation
Animal production, 217
Cowpea
Resistance, multiple, Cowpea mosaic virus, Anthracnose, Bacterial blight, 17
Rust, Sowing date, *Uromyces*. 149
Striga, 91
Vigna unguiculata, Weeding regime, 142
Cowpea mosaic virus
Cowpea, Resistance, multiple, Anthracnose, Bacterial blight, 17
Cowpea severe mosaic virus
Cerotoma arcuata, Vector, 221
Crop sequence
Soil moisture, Fallow, 54
Cyanide
Manihot esculenta, Cassava mosaic disease, 305
Cynodon spp.
Interspecific hybrids, Cytomorphological studies, 25
Cytomorphological studies
Cynodon spp., Interspecific hybrids, 25

Daminozide
Heritability, Body weight, 369
Mustard, leaf, 187
Diethylcarbamazine
Cattle, Stephanofilarial dermatitis, 176
Dioscorea rotundata
Yam, Dwarf yam, 184
Dioscorea spp.
Yam, seed, Minisett, 83
Disulfoton
Solanum, Phorate, Residues, 317
Dolchis uniflorus
Hyacinth bean, Horsegram, *Lablab niger*, 281
Downy mildew
Millet, pearl, *Pennisetum americanum*, 269
Dwarf yam
Yam, *Dioscorea rotundata*, 184

Earthworm cast
Pleurotus sajor-caju, Mushroom, 179
Economic characters
Cattle, Productivity indices, 49
Economic evaluation
Intercropping, Monetary equivalent ratio, 337
Eggplant
Leveillula taurica, Peppers, 355
Encarsia opulenta
Aleurocanthus woglumi, Biological control, 110
Exhaustive cropping
K supply, 87
Experimental design
Statistics, Biometry, 2

Fall armyworm
Spodoptera frugiperda, Sorghum, Maize, 259
Fallow
Soil moisture, Crop sequence, 54
Feedstuff
Wheat straw, Buffalo, 321
Cassava, Fermentation, 326
Fermentation
Cassava, Feedstuff, 326
Fertility
Guinea fowl, Artificial insemination, 135
Fertilizer
Yam, Staking, 38
Fleece weight
Sheep, 167
Foliar nutrients
Piper nigrum, Black pepper, 345
Forage
Mineral composition, 33
Friesian
Cattle, 121

Gliricidia sepium
Leucaena leucocephala, Mineral composition, 125
Goats
Sheep, Sulphur, Nutrition, 158
Sheep, Dwarf, Maize cob, 213
Green manure
Biomass, Rice, 11
Sesbania aculeata, Rice, 209

Groundnut
Pigeonpea, Intercropping, 309
Guinea fowl
Fertility, Artificial insemination, 135
Incubation, Hatchability, 265
Laying characteristics, Reproductive performance, 277

Hatchability
Guinea fowl, Incubation, 265
Heritibility
Body weight, Cattle, 369
Herbicides
Plantago ovata, Pharmaceutical crop, 98
Horsegram
Hyacinth bean, *Lablab niger*, *Dolchis uniflorus*, 281
Hyacinth bean
Horsegram, *Lablab niger*, *Dolchis uniflorus*, 281

Incubation
Guinea fowl, Hatchability, 265
Intercropping
Cassava, Maize, Melon, Okra, 78
Groundnut, Pigeonpea, 309
Monetary equivalent ratio, Economic evaluation, 337
Solanum, Maize, 329
Soybean, N fixation, 73
Interspecific hybrids
Cynodon spp., Cytomorphological studies, 25
Irrigation
Maize, Sunflower, 153

Jack bean
Canavalia ensiformis, Chicks, 201

K supply
Exhaustive cropping, 87

Lablab niger
Hyacinth bean, Horsegram, *Dolchis uniflorus*, 281
Laying characteristics
Guinea fowl, Reproductive performance, 277
Leucaena leucocephala
Gliricidia sepium, Mineral composition, 125
Leveillula taurica
Peppers, Eggplant, 355
Lime
Onion, N fertilizer, *Allium cepa*, 161

Maize
Cassava, Melon, Okra, Intercropping, 78
Fall armyworm, *Spodoptera frugiperda*, Sorghum, 259
Solanum, Intercropping, 329
Sunflower, Irrigation, 153
Cob Sheep, Goats, Dwarf, 213
Manihot esculenta
Cassava mosaic disease, Cyanide, 305
Melon
Cassava, Maize, Okra, Intercropping, 78
Milk
Cattle, Zebu, Simulation of lactation yield, 365
Millet, pearl
Mungbean, *Pennisetum americanum*, 233
Pennisetum americanum, Downy mildew, 269
Mineral composition
Forage, 33
Gliricidia sepium, *Leucaena leucocephala*, 125
Minisett
Yam, seed, *Dioscorea* spp., 83
Monetary equivalent ratio
Intercropping, Economic evaluation, 337
Mungbean
Millet, pearl, *Pennisetum americanum*, 233
Musa
Banana, Tissue culture, 8, 194
Mushroom
Pleurotus sajor-caju, Earthworm cast, 179
Mustard, leaf
Daminozide, 187
N application
Bambara groundnut, *Voandzeia subterranea*, 169
Senna, *Cassia angustifolia*, 69
N fertilizer
Solanum F1 hybrids, pesticide, 181
Onion, Lime, *Allium cepa*, 161
Rice, Carbofuran, 297
N fixation
Soybean, Intercropping, 73
Nutrient composition
Soybean, Processing, 290
Nutrition
Goats, Sheep, Sulphur, 158

Oil Palm Market Review, 372
Okra
Cassava, Maize, Melon, Intercropping, 78
Onion
Lime, N fertilizer, *Allium cepa*, 161

Peanut
Arachis hypogaea, 243
Pennisetum americanum
Millet, pearl, Downy mildew, 269
Millet, pearl, Mungbean, 233
Peppers
Leveillula taurica, Eggplant, 355
Pesticide
Solanum F1 hybrids, N fertilizer, 181
Pharmaceutical crop
Plantago ovata, 61
Plantago ovata, Herbicides, 98
Phaseolus vulgaris
Bean, Phosphorus, 249
Phorate
Solanum, Disulfoton, Residues, 317
Phosphorus
Bean, *Phaseolus vulgaris*, 249
Phytophagous insects
Sorghum, *Sorghum bicolor*, 225
Picking date
Avocado, Chilling sensitivity, 129
Pigeonpea
Groundnut, Intercropping, 309
Piper nigrum
Black pepper, Foliar nutrients, 345
Plantago ovata
Pharmaceutical crop, 61
Pharmaceutical crop, Herbicides, 98
Planting date
Soybean, Seed quality, 145
Pleurotus sajor-caju
Mushroom, Earthworm cast, 179
Potato
CIPC formulation, *Solanum tuberosum*, Sprouting, 206
Processing
Soybean, Nutrient composition, 290
Productivity indices
Cattle, Economic characters, 49
Prostaglandin
Cattle, Zebu, Artificial insemination, 230
Pruning
Amaranthus, Uprooting, 273
Psophocarpus tetragonolobus
Winged bean, 240

Reproductive performance
Guinea fowl, Laying characteristics, 277
Residues
Solanum, Phorate, Disulfoton, 317
Resistance, multiple
Cowpea, Cowpea mosaic virus, Anthracnose, Bacterial blight, 17
Rhizobium
Clover, Antibiotic resistance, 313
Rice
Biomass, Green manure, 11
Carbofuran, Nitrogen, 297
Sesbania aculeata, Green manure, 209
Tillage, Weed control, 43
Algalization, Chemical nutrients, 334
Root-knot nematode
Cardamom, VA mycorrhizal fungi, 21
Rust
Cowpea, Sowing data, *Uromyces*, 149

Seed quality
Soybean, Planting date, 145
Senna
Cassia angustifolia, N application, 69
Serratia rubidaea
Coconut, 342
Sesbania aculeata
Green manure, Rice, 209
Sheep
Fleece weight, 167
Goats, Sulphur, Nutrition, 158
Goats, Dwarf, Maize cob, 213
Simulation of lactation yield
Cattle, Zebu, Milk, 365
Soil moisture
Crop sequence, Fallow, 54
Solanum
Maize, Intercropping, 329
Phorate, Disulfoton, Residues, 317
F1 hybrids, N fertilizer, Pesticide, 181
Potato, CIPC formulation, Sprouting, 206
Sorghum
Fall armyworm, *Spodoptera frugiperda*, Maize, 259
Phytophagous insects, *Sorghum*

bicolor, 225
Sowing date
Cowpea, Rust, *Uromyces*, 149
Soybean
Intercropping, N fixation, 73
Nutrient composition, Processing, 290
Planting date, Seed quality, 145
Spodoptera frugiperda
Fall armyworm, Sorghum, Maize, 259
Sprouting
Potato, CIPC formulation, *Solanum tuberosum*, 206
Staking
Yam, Fertilizer, 38
Statistics
Experimental design, Biometry, 2
Stephanofilarial dermatitis
Cattle, Diethylcarbamazine, 176
Striga
Cowpea, 91
Stylosanthes guianensis
Stylosanthes hamata, Water stress, 105
Stylosanthes hamata
Stylosanthes guianensis, Water stress, 105
Sulphur
Goats, Sheep, Nutrients, 158
Sunflower
Maize, Irrigation, 153

Tannin
Banana, 284
Theobroma cacao
Cacao, Wind injury, 137
Tillage
Rice, Weed control, 43
Tissue culture
Banana, *Musa*, 8, 194
Tomato leaf curl virus
Whitefly, *Bemisia tabaci*, 350

Uprooting
Amaranthus, Pruning, 273
Uromyces
Cowpea, Rust, Sowing date, 149

VA mycorrhizal fungi
Cardamom, Root-knot nematode, 21
Vector
Cowpea severe mosaic virus, *Cerotoma arcuata*, 221
Vigna unguiculata
Cowpea, Weeding regime, 142
Voandzeia subterranea
Bambara groundnut, N application, 169

Water stress
Stylosanthes hamata, *Stylosanthes guianensis*, 105
Weed control
Rice, Tillage, 43
Weeding regime
Cowpea, *Vigna unguiculata*, 142
Wheat straw
Buffalo, Feedstuff, 321
Whitefly
Tomato leaf curl virus, *Bemisia tabaci*, 350
Wind injury
Cacao, *Theobroma cacao*, 137
Winged bean
Psophocarpus tetragonolobus, 240

Yam
Dioscorea rotundata, Dwarf yam, 184
Seed, *Dioscorea* spp., Minisett, 83
Staking, Fertilizer, 38
Yield estimation
Clove, 361